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# ARTÍCULOS ORIGINALES

# Causal Model Moderated by Knowledge of Organic Unprocessed Food Purchase Intent by Extreme Poverty Population in the Urban Area of Hermosillo, Sonora, Mexico

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**RESUMEN** El presente artículo tiene como objetivo desarrollar un modelo que permita definir y determinar cuáles son los atributos de calidad (intrínsecos y extrínsecos) y de creencia que influyen en la intención de compra de alimentos orgánicos no procesados, así como la influencia que ejerce el conocimiento de ellos sobre el consumo de la población en pobreza extrema en Hermosillo, Sonora (México). Para dar respuesta al objetivo planteado, se desarrolló trabajo de campo con una muestra de 382 encuestados, en 10 colonias. La metodología de análisis utilizada fue el modelo de ecuaciones estructurales (SEM, por sus siglas en inglés). Se contrastaron tres de cinco hipótesis planteadas, de donde se puede inferir que el "conocimiento" es un elemento clave en la intención de compra de la población en pobreza extrema.

**PALABRAS CLAVE** atributos de creencia intrínsecos y extrínsecos, conocimiento, intención de compra, pobreza extrema.

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# Knowledge-moderated causal model in purchase intent for unprocessed organic food of people in extreme poverty in the urban area of Hermosillo, Sonora, Mexico

**ABSTRACT** This article aims to develop a model to define and determine the intrinsic and extrinsic quality and belief-related attributes that influence purchase intent for organic unprocessed foods, as well as the influence of the knowledge thereof on the consumption by the population in extreme poverty in Hermosillo, Sonora (Mexico). To meet the proposed target, we developed field work with a sample of 382 respondents in 10 colonies. The analysis methodology used was the structural equation modeling (SEM). Three of five hypotheses were contrasted, whereby it can be inferred that "knowledge" is a key element in purchase intent of population in extreme poverty.

**KEYWORDS** intrinsic and extrinsic attributes of belief, knowledge, purchase intent, extreme poverty.

## Modelo causal moderado pelo conhecimento na intenção de compra de alimentos orgânicos não transformados das pessoas em situação de pobreza extrema na área urbana de Hermosillo, Sonora, México

**RESUMO** Este artigo tem como objetivo desenvolver um modelo para definir e determinar quais os atributos de qualidade (intrínsecos e extrínsecos) e crenças que influenciam a intenção de compra de alimentos orgânicos não processados, e a influência do conhecimento deles sobre o consumo da população em extrema pobreza em Hermosillo, Sonora (México). Para atingir o objetivo proposto, o trabalho de campo foi desenvolvido com uma amostra de 382 entrevistados em 10 colônias. A metodologia de análise utilizada foi o modelo de equações estruturais (SEM, na sigla em Inglês). Três das cinco hipóteses foram constatadas, a partir do que pode-se inferir que o "conhecimento" é um elemento-chave na intenção de compra da população em extrema pobreza.

**PALAVRAS CHAVE** atributos intrínsecos e extrínsecos de crença, conhecimento, intenção de compra, a pobreza extrema..

# Introduction

One of today's main social problems in Mexico is poverty at its different traits: material, capability, food, and extreme poverty. In Mexico, there are 52.1 million poverty-stricken people, out of which 12.8 million live in extreme poverty conditions. In 2008, the percentage of people with lack of access to food went from 21.7% (equivalent to 23.8 million people) to 24.9% in 2010 (equivalent to 28.0 million people), showing an increase of 4.2 million people; in other words, a fourth of the population in Mexico lacked access to food in 2010 (National Council for the Evaluation of Social Development Policy, Coneval, 2012)<sup>1</sup>.

In the State of Sonora, according to Coneval (2011), there are 902.600 poverty-stricken people, out of which 139.400 live in extreme poverty conditions. 2.9% of the population in the municipality of Hermosillo - Sonora - lives in extreme poverty, equivalent to 23.809 people, spread in different urban and rural areas. Poverty and food issues go hand in hand, and based on the importance for poverty-stricken people to cover their daily nutritional requirements, it is important to answer the following questions: Which are the (internal and external) belief attributes, regarding organic food that influence purchase intent? Does the knowledge of what organic food is influence the purchase intent of extreme poverty-stricken population?

The purpose of this research paper is to develop a model that allows defining and determining quality (internal and external) and belief attributes influencing the purchase intent of organic unprocessed food, as well as the influence exerted by knowing what organic unprocessed food is upon its consumption on the part of extreme poverty-stricken population in Hermosillo, Sonora, Mexico. The data collected was helpful to develop a causal model moderated by knowledge, and in that regard, a field work was conducted, by using an expert-validated questionnaire that allowed to evaluate the elements comprising the attributes to be analyzed.

# **Literature Revision**

# Quality (Internal and External Variables) and Belief Attributes Influencing the Purchase Intent Moderated by Knowledge

Zanoli & Naspetti (2002) conducted a research to understand knowledge and motivation when purchasing organic food. The results showed interesting implications for the organic products market, such as the fact that lower prices and better logistics may increase the demand for organic products, and that potential consumers expect tasty products. Likewise, the results showed that organic-product experienced consumers with a high level of information or knowledge consume them more frequently than those with an occasional consumption – or who have less information.

A model comprising internal and external elements was developed, and the following parameters were evaluated: attitudes towards organic food and purchase intent, attitudes towards the environment and purchase intent, knowledge of organic food and attitude towards it, healthy diet, balanced life, and organic food and the environment. The results showed that health attributes and the environment are the most relevant characteristics in the organic food purchasing decision process; likewise, it was found that the more information on organic food is available, the more the purchase intent is positively reinforced (De Magistris & Gracia, 2008).

Espejel, Fandos & Flavián (2009) conducted a research to analyze the perception on quality through the internal and external attributes of organic food, and at the same time measure satisfaction at the moment of consumption and purchase loyalty to "Bajo Aragón olive oil" (with protected designation of origin) as a traditional product from Spain. In addition, the influence of consumers' level of knowledge in the relations described above was analyzed.

The results obtained by the authors through multi-sample structural equation models showed that consumers' satisfaction and loyalty are mainly based on the quality perception of internal attributes (color, appearance, taste, etc.). However, when consumers are classified depending on their level of knowledge, the main satisfaction and

Coneval is a decentralized public organization of the Federal Public Administration created to generate information on the social political situation and measuring poverty, among other tasks, that allow a more accurate decision-making process for those issues.

loyalty variable has to do with external attributes (brand, place of origin, etc.).

Aguirre (2007) conducted a study to determine the profile of consumers of organic products in Costa Rica. His research included sociodemographic data, product characteristics, and purchase motivation showed by consumers of organic products. The most relevant characteristics of said products included appearance, quality, freshness, availability, packaging, and price. The reasons to buy organic products were, in order of importance: the belief that organic products are healthier, environmentally friendly, health concerns, and chemical-free. The most important characteristics for the purchase intent of organic food included health and quality. Other variables influencing the purchase intent and willingness to pay included price, monthly budget to buy food, average monthly income, and knowledge of what organic food is.

Dimitri & Dettmann (2012) conducted a research whose main purpose was to identify what consumers know and do not know about organic food. A first approach analyzed the likelihood of purchasing organic milk, fruit and vegetables, and its effects on – or relation to – demographic factors. Access to organic food, ethnicity, marital status, education level, and income were the variables considered. The results showed that some of the factors most related to the propensity to purchase organic products are income, education level, and marital status. It was also found that a high level of education and income are the variables most related to the increase in the likelihood to buy organic food.

The scientific revision above leads to consider the importance of proving a causal relation between internal variables (e.g., color, flavor, smell, and texture), external variables (e.g., brand, price, and packaging) and quality attributes (e.g., health and safety), on the purchase intent, moderated by the knowledge of organic food on the part of extreme poverty-stricken population, suggesting the following hypothesis:

- H1: Internal quality attributes of organic unprocessed food positively and significantly influence the knowledge perceived by extreme poverty-stricken people.
- **H2:** External quality attributes of organic unprocessed food positively and significantly influence the knowledge perceived by extreme poverty-stricken people.

- **H3:** Belief attributes of organic unprocessed food positively and significantly influence the knowledge perceived by extreme poverty-stricken people.
- H4: Knowledge held by extreme poverty-stricken people of organic unprocessed food positively and significantly influence the Internal Attribute Purchase Intent.
- **H5:** Knowledge held by extreme poverty-stricken people of organic unprocessed food positively and significantly influence the External Attribute Purchase Intent.

Figure 1 shows the proposed conceptual model, which has been theoretically and statistically validated in this paper.

# **Research Design**

This is a non-experimental, transversal research due to its time dimension approach — data was collected in one single moment and time — in which variables were described and their impact on or interrelation with the targeted population was analyzed (extreme poverty-stricken population in the city of Hermosillo, Sonora, Mexico), for the purpose of measuring causal relations between the different constructs proposed in the model to be validated.

## **Data Collection**

Data collection was carried out by a group of six interviewers and two supervisors who were previously trained and familiarized with the final version of the questionnaire, and then with possible field-application problems such as an eventual lack of availability to answer and security risks inherent to extreme poverty areas. The supervisors verified that the questionnaire was applied in an effective way on the targeted population, and that the interviewers were clear when leading consumers to evaluate the items.

The interviews were carried out in all the ten urban neighborhoods of Hermosillo, considered having the highest rate of extreme poverty population density, according to data provided by Coneval (2012). In order to determine the number of people to be interviewed in each neighborhood, population was proportionally prorated. The questionnaire collected enough information to evaluate the conceptual model proposed; data FIGURE 1. Conceptual Model Moderated by Knowledge During the Purchase Intent of Organic Food by Extreme Poverty-Stricken Population



Source: Created by the authors based on the literature revision work (2014).

was collected in-situ through one-to-one interviews conducted at the houses of the interviewees, and the sample size was 382 valid questionnaires (see Table 1).

## Statistical Analysis of Data

### Validation of the Measurement Model

Structural equations based on components/ variations was the methodology used in the statistical analysis of the data, as mentioned above, using SmartPLS 2.0 statistical software (Ringle, Wende & Will, 2005).

To validate the measurement model, the following actions were implemented:

- 1) Validity analysis of contents and apparent validity;
- 2) Individual reliability calculation of items through factor loading for reflection constructs and weight significance for formative constructs;
- Construct validity evaluation: convergent validity and discriminant validity.

#### CONTENT VALIDITY AND APPARENT VALIDITY

In regards to content validity, a comprehensive revision of marketing and agro-food marketingspecialized literature was conducted to theoretically support each one of the measure scales used.

GEOGRAPHIC SCOPE	Hermosillo, Sonora, Mexico
UNIVERSE	23,809 people
SAMPLE UNIT	Extreme poverty-stricken population
METHODOLOGY	One-to-one interviews through structured questionnaires.
SAMPLING PROCEDURE	Simple random sampling - Convenience
SAMPLE SIZE	382
SAMPLE ERROR	± 5,0%
CONFIDENCE LEVEL	95%; p = 0; q = 0.5
FIELD WORK DATE	March 2014

TABLE 1. Data Sheet

Source: Created by the authors

Likewise, an adaption of the initially proposed measure scales was also conducted. By doing so, it was possible to prove the apparent validity, which supports the idea that the measure scale in fact reflects what is intended to be measured. To prove apparent validity, an item filtering process was implemented by several experts, obtaining satisfactory results, as suggested by Zaichkowsky (1985). Similarly, the items were adjusted and nuanced, based on the results of previous qualitative studies.

#### INDIVIDUAL RELIABILITY OF INDICATORS

To prove the individual reliability of indicators as part of a reflective construct, the Hair, Anderson, Tatham & Black (1999) criterion was considered, in which the factor load is ( $\lambda$ ) equal to or higher than 0.550. Factor loads show that the variability shared between the construct and its corresponding indicators is higher than the error variability. Taking into account the acceptance criterion above ( $\lambda \ge 0.550$ ), the following indicators were filtered in a first statistical stage: VI-2: "I perceive the quality of food when I taste it" ( $\lambda = 0.538$ ;  $\lambda^2$  = 0.289); VE-5: "Packaged food means quality"  $(\lambda = -0.541; \lambda^2 = 0.292);$  ICE-1: "Brand is what matters the least when buying food" ( $\lambda$  = -0.278;  $\lambda$ <sup>2</sup> = 0.077) and ICE-3: "Price is the most important factor when deciding what food to buy" ( $\lambda = 0.527$ ;  $\lambda^2$ = 0.277).

The variability component explained by a construct was also calculated (Bollen, 1989) through manifest variable commonality ( $\lambda_i^2$ ). Once the indicators were filtered, the measurement model was once again estimated for determining indicator commonality. To determine the statistical procedure above, the square of the correlation between the manifest variables was calculated, as well as its own latent variable. For instance, the factor load for the second indicator, VI-4. is  $\lambda$ = 0.782. representing a  $\lambda^2$  = 0.611 commonality, which means that 61.1% of the variability of the manifest variable is related to the "Internal quality attributes" construct. Table 2 shows the results of the statistical process.

For this model, the statistical analysis of the internal and External Attribute Purchase Intent construct was performed in order to evaluate, in a more valid fashion, the knowledge held by the targeted population (the extreme poverty-stricken), in terms of internal and external quality.

#### INDIVIDUAL RELIABILITY OF CONSTRUCTS

To calculate the internal consistency of Indicators determining reflective constructs, construct reliability was analyzed using Cronbach's alpha ( $\alpha$ ) and the compound-construct reliability coefficient ( $\rho_c$ ). Table 3 shows the determination of convergent validity, and Table 4 shows discriminant validity.

#### CONVERGENT AND DISCRIMINANT VALIDITY

An analysis of the average variance extracted – AVE – was carried out in order to determine the convergent validity, which must be over 0.500 (Fornell & Larcker, 1981); therefore, all the constructs meet the empirical criterion (see Table 3). To determine the discriminant validity, Table 4 shows that the Indicators in bold represent the AVE square root results between the constructs and their measurements. Indicators below the diagonal (bold results) are the correlations between the constructs. According to Sánchez & Roldán (2005), for the discriminant validity to be satisfied, the indicators over the diagonal must be higher than the indicators below them; therefore, the statistical rule is met.

#### Validation of the Structural Model

The validation of the structural model was analyzed through two basic indicators (Johnson, Herrmann & Huber, 2006):

- The explained variance of internal or dependent variables (R<sup>2</sup>) must be equal to or higher than 0.100 (Falk & Miller, 1992). Based on such statistical criterion, all constructs share an acceptable prediction power quality (see Table 5).
- 2) Path *or pesos standardized regression coefficients* ( $\beta$ ) must at least be 0.200 to be considered significant, and ideally be over 0.3 (Chin, 1998). Table 5 shows the causal relations proposed as hypotheses in regards to the latent variables that meet the acceptance criterion proposed by Chin (1998).

#### TABLE 2. Measurement Model: Individual Reliability of Indicators

CONSTRUCT INDICATORS	FACTOR LOADS (Λ)	COMMONALITY (Λ <sup>2</sup> )
Internal Attributes		
VI1: To me, food color indicates good quality	0.651***	0.423
VI2: I perceive the quality of food when I taste it	0.538 n.s.	0.289
VI3: Food smell/aroma means quality	0.669***	0.447
VI4: Food texture defines its quality	0.782***	0.611
External Attributes		
<b>VE1:</b> I choose food products that are represented by a good quality brand	0.707***	0.499
VE2: The brand of food products is a sign of quality	0.763***	0.582
VE3: High prices for a food product means higher quality	0.749***	0.561
VE4: The price of a food product is an indicator of its quality	0.758***	0.574
VE5: A packaged food product is sign of quality	0.541 n.s.	0.292
Belief Attributes		
AC1: I would consume organic food because I think it is healthier	0.603***	0.363
<b>AC2</b> : Consuming organic food does not pose a risk to health	0.671***	0.450
AC3: Organic food is nutritious	0.801***	0.641
<b>AC4:</b> I would consume organic food since it is more reliable /safer	0.830***	0.688
Internal Attribute Purchase Intent		
ICl1: Food color must be correct so that I decide to buy it	0.609***	0.370
ICl2: Food taste is final for me to buy it	0.572***	0.327
ICl3: Food smell/aroma must be pleasant to buy it	0.658***	0.432
ICl4: I buy food if I like its texture	0.825***	
External Attribute Purchase Intent		
ICE1: Brand is the least important characteristic when buying food	-0.278 n.s.	0.077
ICE2: I think of myself as a loyal buyer of brand food	0.685***	0.469
ICE3: Price is the most important factor when buying food	0.527 n.s.	0.277
ICE4: I am driven to buy packaged food	0.562***	0.315
ICE5: Food packaging motivates me to buy it	0.819***	0.670
Knowledge		
CON3: How healthy organic food is, means higher quality	0.870***	0.756
CON6: Organic food impacts health positively	0.851***	0.724

**Note:** \*\*\* t value > 2.576 (p < 0.01); \*\* t value > 1.960 (p < 0.05); \* t value > 1.645 (p < 0.10); n.s. = non-significant. Source: Created by the authors based on the statistical analysis of data (2014).

#### TABLE 3. Measurement Model: Construct Reliability

CONSTRUCT / INDICATORS	Cronbach's Alpha (ɑ)	Compound Reliability (ρ <sub>c</sub> )	Average Variance Extracted Analysis (AVE)
Internal Attributes (VI-1; VI-3; VI-4)	0.5406	0.7636	0.5212
External Attributes	0.7638	0.8490	0.5843
(VE-1; VE-2; VE-3; VE-4)			
Belief Attributes (AC-1; AC-2; AC-3; AC-4)	0.7097	0.8198	0.5361
Knowledge (CON-3; CON-6)	0.6488	0.8505	0.7399
Internal Attribute Purchase Intent (ICI-1; ICI-2; ICI-3; ICI;4)	0.6199	0.7642	0.4528
External Attribute Purchase Intent (ICE-2; ICE-4; ICE-5)	0.5900	0.7597	0.5197

Source: Created by the authors based on the statistical analysis of data (2014).

TABLE 4. Measurement Model: Standardized Correlation	tion Matrix Between the Different Latent Variables
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CONSTRUCT	1	2	3	4	5	6
Internal Attributes (1)	0.7219					
External Attributes (2)	0.2058	0.7643				
Belief Attributes (3)	0.3245	0.1799	0.7321			
Knowledge (4)	0.2794	0.2247	0.5723	0.861		
Internal Attribute Purchase Intent (5)	0.4927	0.3589	0.3152	0.2557	0.6729	
External Attribute Purchase Intent (6)	0.1184	0.5092	0.1799	0.2134	0.2756	0.7209

Source: Created by the authors based on the statistical analysis of data (2014).

#### TABLE 5. PLS Analysis Results – Structural Model

HYPOTHESES	HYPOTHESES SIGN	STANDARDIZED PATH COEFFICIENTS (B)	T VALUE (BOOTSTRAP)
H1: Internal Attributes Knowledge	+	0.0862	0.8985 n.s.
H2: External Attributes	+	0.1127	1.3001 n.s.
H3: Belief Attributes	+	0.5241	4.5742***
H4: Knowledge> Internal Attribute Purchase Intent	+	0.2557	2.4629**
H5: Knowledge — External Attribute Purchase Intent	+	0.2134	2.0151*

**Note:** \*\*\* t value > 2.576 (p < 0.01); \*\* t value > 1.960 (p < 0.05); \* t value > 1.645 (p < 0.10); n.s. = non-significant

CONSTRUCT	EXPLAINED VARIANCE R <sup>2</sup>	STONE-GEISSER TEST* Q <sup>2</sup>	
Internal Attributes			
External Attributes			
Belief Attributes			
Knowledge	0.3493	0.0302	
Internal Attribute Purchase Intent	0.0654	0.0259	
External Attribute Purchase Intent	0.0456	0.0188	

\* Parameter Q<sup>2</sup> (cross-validated redundancy) must be higher than zero so that a construct is valid in terms of predictability (Chi, 1998). However, Sáenz, Aramburu & Rivera (2007) state that when Q<sup>2</sup> values are negative and close to zero, the construct is within the recommended limits to have prediction power.

Source: Created by the authors based on the statistical analysis of data (2014).

#### GOODNESS OF FIT INDEX (GOF)

In PLS structural models, there are no measurements related to the goodness of fit; therefore, resampling parametric techniques are used to analyze the stability of the model parameters. The foregoing is evaluated through Student's *t* values using the *bootstrap* technique with a resampling of 500 cases, as suggested by Chin (1998). Table 5 shows that all the causal relations proposed are significant. Recently, Tenenhaus (2005) and Esposito Vinzi, Trinchera, Squillacciotti & Tenenhaus (2008) suggested a Goodness of Fit global criterion for PLS structural models. The authors above proposed that the global Goodness of Fit Index is estimated through the square root resulting from the multiplication of the arithmetic mean of the average variance extracted (AVE) by the arithmetic mean

of the explained variance of internal or dependent variables ( $\mathbb{R}^2$ ). Table 6 shows the Goodness of Fit Index (GoF) for the analysis model being *0.2928*, which proves there is a moderate adjustment both in the measurement model and in the structural model, fulfilling the statistical criterion that says the Goodness of Fit measurement must vary between 0 and 1; and the higher the value, the better the index (Tenenhaus, 2008).

## Interpretation of Results

Once the measurement and structural models were validated, results were analyzed to contrast the five hypotheses stated for the proposed model. The structural model results show that the internal attributes of organic unprocessed food

CONSTRUCT	AVERAGE VARIANCE EXTRACTED (AVE)	EXPLAINED VARIANCE (R <sup>2</sup> )	GOODNESS OF FIT INDEX <sup>a</sup>
Internal Attributes	0.5212		
External Attributes	0.5843		
Belief Attributes	0.5361		
Knowledge	0.7399	0.3493	
Internal Attribute Purchase Intent	0.4528	0.0654	
External Attribute Purchase Intent	0.5197	0.0456	
Arithmetic Mean	0.5197	0.1534	0.2928

TABLE 6. Goodness of Fit Index for Measurement and Structural Models

<sup>a</sup> Goodness of Fit Index (GoF) =  $V(AVE)^*$  (R<sup>2</sup>) (Tenenhaus 2005; Esposito *et al.*, 2008).

Source: Created by the authors based on the statistical analysis of data (2014).

do not have an impact on the knowledge extreme poverty-stricken people have; therefore, there were no significant elements in the following proposed hypotheses to contrast them with:

**H**<sub>1</sub>: Internal quality attributes of organic unprocessed food positively and significantly influence the knowledge perceived by extreme poverty-stricken people. (H1: β = 0.0862; p > 0.05).

The same happened for hypothesis 2:

 $H_2$ : External quality attributes of organic unprocessed food positively and significantly influence the knowledge perceived by extreme poverty-stricken people. (H2: β = 0.1127; p > 0.05).

On the other hand, hypotheses 3, 4 and 5 were contrasted and it was proven that belief attributes positively and significantly influence the knowledge perceived by extreme poverty-stricken people (H3:  $\beta$  = 0.5241; p < 0.01); in addition, it was proven that knowledge influences the Internal Attribute Purchase Intent (H4:  $\beta$  = 0.2557; p < 0.10), and the External Attribute Purchase Intent (H5:  $\beta$  = 0.2134; p < 0.10). It is possible, then, to infer from the above that "knowledge" is a key element in the purchase intent of extreme poverty-stricken population.

# Conclusions and Business Implications

The results of this research lead to a series of business, government, and social implications that, once they are developed in an integral manner, may help create strategies that resolve the significant big problem we have in our society in terms of poverty and nutrition. The answers given to the research questions allow a view of a market segment that wishes to improve their food consumption conditions for a healthy option, but the challenge lays on making these organic products available to this vulnerable segment of society. The business sector can develop a trading strategy through an efficient logistics distribution chain for the purpose of decreasing logistics costs, and, thus, product prices.

There is a genre among entrepreneurs, the "social entrepreneurs", that according to Fundación Skoll (2012), are proven leaders with approaches and solutions to social problems seeking to improve the lives and conditions of numerous disadvantaged individuals. Besides, this type of entrepreneurship implies the conversion of a new idea into a successful innovation, by means of skills, vision, creativity, perseverance, and exposure to risk. These social entrepreneurs are different from business entrepreneurs due to their commitment to social impact. This businessman profile may be well fitted in the development of business projects that can make unprocessed organic food available to the extreme povertystricken. Currently, through Instituto Nacional de la Economía Social, Inaes<sup>2</sup>, a large variety of projects proposed by social entrepreneurs is being supported (e.g., handcrafts, restaurants, cooking, farming, and agrarian projects).

In addition to the above, the Comercio Justo (Fair Trade) program is working to improve access to markets and commercial conditions for small producers and workers in agricultural plantations (FAO, 2014). This work scheme is different

<sup>2</sup> Inaes stands for the National Institute for Social Economy, a National Government agency in charge of legislating, controlling and promoting social economy.

from conventional commerce since it is based on social justice, product quality, and environmentally friendly practices, in addition to fostering a direct and long-term relation between producers and consumers, and contributing to the construction of a sustainable and supportive development model.

Based on the model resulting from this research, the business sector could design marketing strategies highlighting the following attributes of unprocessed organic food: health and reliability (Belief Attributes), taste, aroma, and texture (Internal Quality Attributes), brand and packaging (External Quality Attributes). Marketing would also foster the disclosure of organic food main benefits within the specific market segment, promoting their knowledge, thereby influencing their consumption.

The foregoing evinces the importance of companies and the government to jointly attack poverty and stimulate nutrition. On the one hand, the business sector could generate trading and marketing strategies to make organic food available to extreme poverty-stricken population, and on the other hand, the government could implement different social programs promoting the consumption of unprocessed organic food. It is important to highlight the need for the three government levels (municipal, state, and national) to jointly cooperate and create strong alliances, and achieve positive goals in the short term.

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